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SEMICONDUCTOR DEVICE (54) MANUFACTURE OF

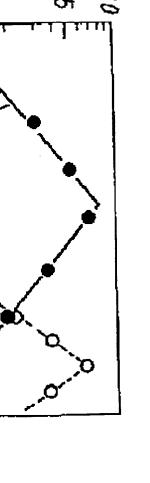
(57) Abstract:

characteristic and is just suitable for excellent step-portion covering including boron which ensures manufacturing a silicon film PURPOSE: To provide a method of

manufacturing process under a low temperature condition.

CONSTITUTION: An amorphous Si film is deposited by the pressure-reduced CVD method under a low temperature of 200 or higher and 400°C or lower using any one of disilane (Si2H6) or trisilane (Si3H6) and dibolane (B2H6). Thereby, a Si film including boron which ensures excellent step-portion covering characteristic can be formed. Using the obtained Si film as a diffusion source, extremely shallow junction may be formed.

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膜堆積速度(nm/min)

0.5

300

400

500

原推凝温度(。C)

5/10/01